

REMARKS

This Application has been carefully reviewed in light of the final Office Action mailed April 21, 2004. Applicants respectfully request further examination and favorable action in view of the following remarks.

Claims

Applicants have made a clarifying amendment to Claim 2 to correct a typographical error. This amendment is not narrowing and is not made in relation to patentability. Moreover, the amendment was indicated in a previous response, but was not marked as "Currently Amended." Applicants respectfully request that the Examiner enter the amendment to Claim 2 if not entered previously.

Drawings

Informal drawings were filed with the Application on October 10, 2000. Formal drawings are attached. Additionally, a separate paper containing the formal drawings and a transmittal letter addressed to the Official Draftsperson are attached.

Section 103 Rejections

The Examiner rejects Claims 1, 3, 8, 10-15, and 17-20 under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 6,636,242 to Bowman-Amuah ("*Bowman-Amuah*") in view of what the Examiner alleges would have been obvious at the time the invention was made. The Examiner rejects Claims 2, 4-7, 9, and 16 under 35 U.S.C. § 103(a) as being unpatentable over *Bowman-Amuah* in view of what the Examiner alleges would have been obvious at the time the invention was made and U.S. Patent No. 6,549,956 to Bass et al. ("*Bass*"). Applicants respectfully traverse these rejections and submit the following arguments regarding the allowability of the claims over the cited references and allegedly obvious information.

***Bowman-Amuah*, Even in Combination with Allegedly Obvious
Information and with Bass, Fail to Disclose, Teach, or Suggest Numerous
Limitations Recited in Applicants Claims**

Bowman-Amuah discloses a system, method, and article of manufacture for assigning a view to an activity. (Column 2, lines 18-19) The View Configurer disclosed in *Bowman-Amuah* receives notification of a startup event of an activity and a reference to a first instance of an object created by the startup event, and which view to launch is determined in response to the receipt of the notification and the reference based on predetermined criteria. (Column 2, lines 19-25; Column 252, lines 4-8) According to *Bowman-Amuah*, an Activity is business logic, bundled separately from the presentation logic, that is responsible for tasks such as managing client logical units of work, maintaining client representation of a business model, validating across multiple interfaces (complex business logic), handling errors and exceptions, communicating with a server and other services, creating other Activities, and triggering events to be “caught” and acted on by the presentation logic. (Column 248, lines 8-20)

According to *Bowman-Amuah*, the View Configurer listens to activity broadcasts to detect notifications of startup events for Activities and references to the new instances of objects that are created by these Activities. (Column 252, line 61, through Column 253, line 20) In response to the notification, the View Configurer determines which view to launch based on predetermined criteria. (Column 252, lines 21-22) The criteria may include, for example, user preferences, experience levels, security profiles, or workflow settings. (Column 253, lines 22-24) The view is then attached to the underlying activity. (Column 253, lines 24-25) *Bowman-Amuah* also gives an example of using an Abstraction Factory to create an abstract object for a concrete object based on an identifier for a concrete object and an identifier for an abstract interface associated with the concrete object. (Column 191, lines 56-64)

Bowman-Amuah discloses a Field Interaction Manager that coordinates activity across the fields in a window by invoking application logic based on the state of the fields and user actions. (Column 36, lines 21-24) For example, the Field Interaction Manager may disable an “OK” button until all required field contain valid data. (Column 36, lines 24-26)

Bowman-Amuah also discloses a State Management Services module that enables information to be passed or shared among interfaces such as windows and Web pages. (Column 101, lines 49-51) For example, the State Management Services module passes fields from one window to another window. (Column 101, lines 51-52)

Bowman-Amuah specifies that the relationship between the Activities and the View Configurer is dictated by the Interface Control Model (ICM), also known as the MVC model, in which the Interface (Viewing portion) is separate from the Control and the Model (data portion) of an application. (Column 229, lines 32-34; Column 252, lines 36-48) Thus, according to *Bowman-Amuah*, “the activity doesn’t know about the existence of the View Configurer.” (Column 252, lines 63-64) Instead, the View Configurer “listens to activity broadcasts such as when the controller starts up.” (Column 252, lines 64-65) According to *Bowman-Amuah*, an activity opening up its own view “violates the ICM approach, because then the model is talking directly up to the view.” (Column 252, lines 30-32)

Bass discloses a network that uses two channel adapters to couple publication and subscription systems together via the Internet. (Abstract, lines 1-3) The channel adapters act as a proxy or an agent for communications and data exchanges between the business applications. (Column 3, lines 23-25) *Bass* provides no disclosure, teaching, or suggestion about the processes or applications used by the systems other than the adapters. Consequently, *Bass* provides no disclosure, teaching, or suggestion with respect to workflows, activities, or views over and above that provided by *Bowman-Amuah*.

The proposed combination of *Bowman-Amuah* and *Bass*, even when considered or in combination with knowledge generally available to those of ordinary skill in the art at the time of the invention, fails to disclose, teach, or suggests numerous limitations recited in Applicants’ claims for at least the following reasons.

1. The proposed combination fails to disclose, teach, or suggest a process module with states, each of which comprises logic defining a portion of a business process and a view identifier

Bowman-Amuah fails to disclose, teach, or suggest a process module having states defining portions of a business process. *Bowman-Amuah* discloses activities associated with a business process, but it fails to provide any disclosure that such activities have states or that there is any connection between those states and a corresponding view. As discussed above, *Bowman-Amuah* describes coordinating the fields of a window using the states of the fields, but fails to disclose, teach, or suggest the recited process module having states corresponding to portions of a business module, much less a view identifier for each state. Consequently, *Bowman-Amuah* fails to disclose, teach, or suggest “a process module having a plurality of states, each state comprising logic defining a portion of a business process and comprising an identifier of a corresponding view to be presented to a user,” as recited in Claim 1 or the analogous limitations and additional features recited in other claims, such as Claim 3-5, 8, 11, 15, and 17. *Bass* also fails to provide any disclosure, teaching, or suggestion that would, separately or in combination with *Bowman-Amuah*, remedy these deficiencies. For at least these reasons, the proposed combination of references fails to disclose, teach, or suggest particular limitations relating to the process module recited in Applicants’ claims, such as those recited in Claims 1, 3-5, 8, 11, 15, and 17.

2. The proposed combination fails to disclose, teach, or suggest view identifiers comprising logical specifications of views

As noted above, the proposed combination of references fails to disclose, teach, or suggest a process module having states comprising view identifiers. Thus, the proposed combination of references also fails to disclose, teach, or suggest the additional feature that such identifiers comprise a logical specification of the view that can be used by another component (such as a controller) to generate a view. Moreover, the identifier of the abstract interface described in *Bowman-Amuah* fails to disclose, teach, or suggest an identifier that comprises a logical specification of a view. As discussed above, the View Configurer determines which view to launch based on predetermined criteria, but the abstract interface identifier is not used to provide the criteria. Furthermore, there is no motivation to include

the criteria in the abstract interface identifier, since the abstract interface identifier is only needed to determine an abstract object corresponding to a concrete object. For at least these reasons, the proposed combination of references fails to disclose, teach, or suggest particular limitations relating to the logical specifications recited in Applicants' claims, such as those recited in Claims 1, 3-4, 8-11, 15-17, and 20.

**3. The proposed combination fails to disclose, teach, or suggest
receiving a view identifier from a process module**

As noted above, neither reference discloses a process module having states defining portions of a business process. As discussed above, *Bowman-Amuah* discloses activities associated with business logic. These activities, however, do not communicate view identifiers, so *Bowman-Amuah* cannot possibly disclose, teach, or suggest the recited limitation of receiving such identifiers. Although the View Configurer does listen for broadcast messages from activities, those messages only indicate that activities have started up and identify the object created by the startup of activity. They do not identify a corresponding view, nor do they provide a logical specification of that view. *Bass* does not disclose, teach, or suggest any application with states related to a business process at all, much less the recited process module, and therefore cannot possibly disclose, teach, or suggest receiving view identifiers from such a module. For at least these reasons, the proposed combination of references fails to disclose, teach, or suggest "receiving a view identifier from the process module," as recited in Claim 1, or similar limitations recited in Claims 2-5, 8, 11, 15, and 17.

**4. The proposed combination fails to disclose, teach, or suggest
generation or selection of views based on a logical specification of the view
in a view identifier**

As noted above, neither reference discloses, teaches, or suggests, a view identifier comprising a logical specification of the view. Furthermore, neither reference discloses, teaches, or suggests the generation of a view from a logical specification of the view in a view identifier. In each of the references, the parameters for the view are generated by an autonomous module that determines the parameters for the view. The View Configurer

disclosed in *Bowman-Amuah* determines which view to launch based on predetermined criteria, but the abstract interface identifier is not used to provide the criteria. *Bass* discloses autonomous adapters that generate views in response to data, but the adapters do not receive logical specifications of the view from outside modules. For at least these reasons, the proposed combination of references fails to disclose, teach, or suggest an element that “generates views for the user that are based on the logical specifications of the views in the view identifiers,” as recited in Claim 1, or similar limitations in Claims 3-4, 8-11, 15-17, and 20.

**5. The proposed combination fails to disclose, teach, or suggest
additional subject matter of the dependent claims**

The claims that depend on independent claims 1, 4, 8, and 15 include all of the limitations of the claims upon which they depend and, accordingly, all of the elements of those claims that are not disclosed, taught, or suggested in the proposed combination of references relied on by the Examiner. For at least that reason, they are allowable over the proposed combination of references. But the proposed combination of references also fails to disclose additional features recited in the dependent claims. For example, the proposed combination of references fails to disclose, teach, or suggest the second controller as recited in Claim 3. The Examiner relies on an “Object Oriented controller class” disclosed in *Bowman-Amuah* against the recited second controller. (Office Action, page 4) Applicants respectfully request that the Examiner identify such controller class in the disclosure of *Bowman-Amuah*, as Applicants cannot locate such controller class. The proposed combination of references also fails to disclose, teach, or suggest accessing a business application software module to determine which view identifier to generate as recited in Claim 5. The proposed combination of references also fails to disclose, teach, or suggest various other limitations that are distinguishable from the proposed combination of references for reasons analogous to those stated above. For at least these reasons, the proposed combination of references fails to disclose, teach, or suggest the limitations recited in the dependent claims.

**The Proposed Combination or Modification Would Change the Principle
of Operation of *Bowman-Amuah***

Even if the combinations or modifications of *Bowman-Amuah* proposed by the Examiner disclosed, taught, or suggested the limitations recited in Applicants' claims, which they do not, the proposed combinations or modifications would still be insufficient to support the Examiner's obviousness rejection because each of the proposed combinations or modifications would change the principle of operation of the combined or modified reference. A proposed combination or modification that modifies the principle of operation of any of the references is insufficient to support a *prima facie* case of obviousness. M.P.E.P. § 2143.01 ("[i]f the proposed modification or combination would change the principle of operation of the prior art invention being modified, then the teachings of the references are not sufficient to render the claims *prima facie* obvious." (quoting *In re Ratti*, 270 F.2d 810, 123 U.S.P.Q. 349 (C.C.P.A. 1959))). The combination of references proposed by the Examiner would change the principle of operation of a reference, and is therefore insufficient to render the claims obvious, for at least the following reasons.

The View Configurer of *Bowman-Amuah* manages the relationship between the activities and view by monitoring a system for broadcasts associated with the startup of activities (in the model layer) and generating a view in response to the startup. This allows the View Configurer to manage the relationship without direct communication between the activity and the view in accordance with the ICM/MVC approach, which in turn permits the activity portion of the application to be portable to a variety of different environments. As discussed above, *Bowman-Amuah* states that the activity doesn't know about the existence of the View Configurer. (Column 252, lines 63-64) The Examiner proposes that the View Configurer of *Bowman-Amuah* might be modified to produce the recited limitations of several claims. But the modification of the disclosure of *Bowman-Amuah* such that the activity communicated a message that included a logical specification of the view would violate the ICM/MVC approach. The proposed modification would change the View Configurer from a component that passively observes system broadcasts, allowing it to be functionally separate from the activities, into a component that actively exchanges information related to the view function with activities in the model portion of the

application. Thus, the proposed modification would modify the principle of operation of the View Configurer and is therefore insufficient to support a *prima facie* case of obviousness.

For at least these reasons, the proposed combinations or modifications of *Bowman-Amuah* relied on by the Examiner as purportedly teaching the limitations recited in Applicants' claims would modify the principle of operation of *Bowman-Amuah* and are therefore insufficient to support the Examiner's obviousness rejection.

***Bowman-Amuah* Teaches Away from the Proposed Combination**

Even if the proposed combination of *Bowman-Amuah* with what the Examiner alleges was generally known to those of ordinary skill in the art at the time of the invention disclosed, taught, or suggested the limitations recited in Applicants' claims, which it does not, the proposed combination would still be insufficient to support the Examiner's obviousness rejection because *Bowman-Amuah* teaches away from such a combination. A proposed combination to show obviousness is improper where one or more of the references teach away from the proposed combination. M.P.E.P. § 2145(X)(2) ("[i]t is improper to combine references where the references teach away from their combination." (quoting *In re Grasselli*, 713 F.2d 731, 743; 218 U.S.P.Q. 769, 779 (Fed. Cir. 1983))). The combination proposed by the Examiner is improper, and therefore insufficient to render the claims obvious, for at least the following reasons.

Bowman-Amuah discloses that the View Configurer operates according to the ICM/MVC approach, and indeed, this is what permits the portability of the activity-View Configurer combination taught in *Bowman-Amuah*. As discussed above, *Bowman-Amuah* states that an activity doesn't know about the existence of the View Configurer. (Column 252, lines 63-64) Thus, *Bowman-Amuah* teaches away from any modifications that involve communication of view information between the model portion of an application and the view portion of an application, including the modifications of the View Configurer proposed by the Examiner to attempt to meet the recited limitations of the rejected claims. Even though *Bowman-Amuah* mentions the use object oriented programming, which according to the Examiner encourages modification, *Bowman-Amuah* still teaches away from the proposed

combination. Because *Bowman-Amuah* teaches away from the proposed combination, the proposed combination is an improper basis for the obviousness rejection.

For at least these reasons, *Bowman-Amuah* teaches away from the Examiner's proposed combination and, therefore, the proposed combination is insufficient to support the Examiner's obviousness rejection.

The Proposed Combination or Modification is Not Taught, Suggested, or Motivated in the Cited Prior Art and is Therefore Improper

Applicants respectfully submit that the Examiner's conclusory assertion that it would have been obvious to modify the teachings of *Bowman-Amuah* to arrive at Applicants' invention is entirely insufficient to support a *prima facie* case of obviousness under 35 U.S.C. § 103(a) under the M.P.E.P. and the governing Federal Circuit case law.

The question raised under 35 U.S.C. § 103 is whether the prior art taken as a whole would suggest the claimed invention taken as a whole to one of ordinary skill in the art at the time of the invention. Accordingly, even if all elements of a claim are disclosed in various prior art references, which is certainly not the case here as discussed above, the claimed invention taken as a whole cannot be said to be obvious without some reason given in the prior art why one of ordinary skill at the time of the invention would have been prompted to modify the teachings of a reference or combine the teachings of multiple references to arrive at the claimed invention.

The M.P.E.P. sets forth the strict legal standard for establishing a *prima facie* case of obviousness based on modification or combination of prior art references. "To establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references where combined) must teach or suggest all the claim limitations." M.P.E.P. § 2142, 2143. The teaching, suggestion, or motivation for the modification or

combination and the reasonable expectation of success must both be found in the prior art and cannot be based on an applicant's disclosure. *See Id.* (citations omitted). "Obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either explicitly or implicitly in the references themselves or in the knowledge generally available to one of ordinary skill in the art" at the time of the invention. M.P.E.P. § 2143.01. Even the fact that references *can* be modified or combined does not render the resultant modification or combination obvious unless the prior art teaches or suggests the desirability of the modification or combination. *See Id.* (citations omitted). Moreover, "To establish *prima facie* obviousness of a claimed invention, all the claim limitations must be taught or suggested by the prior art. All words in a claim must be considered in judging the patentability of that claim against the prior art." M.P.E.P. § 2143.03 (citations omitted).

The governing Federal Circuit case law makes this strict legal standard even more clear.¹ According to the Federal Circuit, "a showing of a suggestion, teaching, or motivation to combine or modify prior art references is an essential component of an obviousness holding." *In re Sang-Su Lee*, 277 F.3d 1338, 1343, 61 U.S.P.Q.2d 1430, 1433 (Fed. Cir. 2002) (quoting *Brown & Williamson Tobacco Corp. v. Philip Morris Inc.*, 229 F.3d 1120, 1124-25, 56 U.S.P.Q.2d 1456, 1459 (Fed. Cir. 2000)). "Evidence of a suggestion, teaching, or motivation . . . may flow from the prior art references themselves, the knowledge of one of ordinary skill in the art, or, in some cases, the nature of the problem to be solved." *In re Dembiczak*, 175 F.3d 994, 999, 50 U.S.P.Q.2d 1614, 1617 (Fed. Cir. 1999). However, the "range of sources available . . . does not diminish the requirement for actual evidence." *Id.* Although a prior art device "may be capable of being modified to run the way the apparatus is claimed, there must be a suggestion or motivation in the reference to do so." *In re Mills*, 916 F.2d at 682, 16 U.S.P.Q.2d at 1432. *See also In re Rouffet*, 149 F.3d 1350, 1357, 47 U.S.P.Q.2d 1453, 1457-58 (Fed. Cir. 1998) (holding a *prima facie* case of obviousness not made where the combination of the references taught every element of the claimed invention but did not provide a motivation to combine); *In Re Jones*, 958 F.2d 347, 351, 21 U.S.P.Q.2d 1941, 1944 (Fed. Cir. 1992) ("Conspicuously missing from this record is any evidence, other

Note M.P.E.P. 2145 X.C. ("The Federal Circuit has produced a number of decisions overturning obviousness rejections due to a lack of suggestion in the prior art of the desirability of combining references.").

than the PTO's speculation (if that can be called evidence) that one of ordinary skill in the herbicidal art would have been motivated to make the modification of the prior art salts necessary to arrive at" the claimed invention.). Even a determination that it would have been obvious to one of ordinary skill in the art at the time of the invention to try the proposed modification or combination is not sufficient to establish a *prima facie* case of obviousness. *See In re Fine*, 837 F.2d 1071, 1075, 5 U.S.P.Q.2d 1596, 1599 (Fed. Cir. 1988).

In addition, the M.P.E.P. and the Federal Circuit repeatedly warn against using an applicant's disclosure as a blueprint to reconstruct the claimed invention. For example, the M.P.E.P. states, "The tendency to resort to 'hindsight' based upon applicant's disclosure is often difficult to avoid due to the very nature of the examination process. However, impermissible hindsight must be avoided and the legal conclusion must be reached on the basis of the facts gleaned from the prior art." M.P.E.P. § 2142. The governing Federal Circuit cases are equally clear. "A critical step in analyzing the patentability of claims pursuant to [35 U.S.C. § 103] is casting the mind back to the time of invention, to consider the thinking of one of ordinary skill in the art, guided only by the prior art references and the then-accepted wisdom in the field. . . . Close adherence to this methodology is especially important in cases where the very ease with which the invention can be understood may prompt one 'to fall victim to the insidious effect of a hindsight syndrome wherein that which only the invention taught is used against its teacher.'" *In re Kotzab*, 217 F.3d 1365, 1369, 55 U.S.P.Q.2d 1313, 1316 (Fed. Cir. 2000) (citations omitted). In *In re Kotzab*, the Federal Circuit noted that to prevent use of hindsight based on the invention to defeat patentability of the invention, the court requires the Examiner to demonstrate a motivation in the prior art to combine the references that are alleged to create the case of obviousness. *See id.* *See also*, e.g., *Grain Processing Corp. v. American Maize-Products*, 840 F.2d 902, 907, 5 U.S.P.Q.2d 1788, 1792 (Fed. Cir. 1988). Similarly, in *In re Dembiczak*, the Federal Circuit reversed a finding of obviousness by the Board, explaining again that the required evidence of such a teaching, suggestion, or motivation is absolutely essential to avoid impermissible hindsight reconstruction of an applicant's invention:

Our case law makes clear that the best defense against the subtle but powerful attraction of hind-sight obviousness analysis is *rigorous application of the requirement for a showing of the teaching or motivation to combine prior art*

references. Combining prior art references without evidence of such a suggestion, teaching, or motivation simply takes the inventor's disclosure as a blueprint for piecing together the prior art to defeat patentability—the essence of hindsight.

175 F.3d at 999, 50 U.S.P.Q.2d at 1617 (emphasis added) (citations omitted).

The Examiner's conclusion that it would have been obvious to those of ordinary skill in the art to modify the system disclosed in *Bowman-Amuah* to arrive at the invention recited in Claim 1, including each limitation recited in Claim 1, is not supported by any teaching, suggestion, or motivation in *Bowman-Amuah*. Applicant respectfully submits that the purported motivation for modifying *Bowman-Amuah* falls well short of the requirements set forth in the M.P.E.P. and the governing Federal Circuit case law. Since the Examiner has not provided a sufficient teaching, suggestion, or motivation in the prior art, Applicants respectfully submit that the Examiner has not made a proper *prima facie* case of obviousness and the rejection should be withdrawn.

In the Office Action, the Examiner states: "While not expressly disclosed [*sic*] the view identifier comprising logical specifications of the corresponding view, Bowman-Amuah disclosed and suggested the use of identifiers in the Abstraction Factory." (Office Action, Page 3, second paragraph) The Examiner also states: "Abstraction Factory is an abstraction layer used by the view configurer to generate or launch different views." (Office Action, Page 3, second paragraph) The Examiner continues: "This provides the motivation for an ordinary skill [*sic*] artisan at the time the invention was made to associate the identifiers in the Abstraction Factory and the view in the view configurer." (Office Action, Page 3, second paragraph)

First, Applicants respectfully submit that the Examiner's speculation, in hindsight with the benefit of Applicants' claims, that *Bowman-Amuah* would disclose a view identifier comprising a logical specification of a view specifically recited in Claim 1 is entirely insufficient under the M.P.E.P. and governing Federal Circuit cases. Second, as the above discussion makes clear, the identifier disclosed in *Bowman-Amuah* fails to disclose, teach, or suggest an identifier that comprises a logical specification of a view. As discussed above, the

View Configurer determines which view to launch based on predetermined criteria, but the abstract interface identifier is not used to provide the criteria. Furthermore, there is no motivation to include the criteria in the abstract interface identifier, since the abstract interface identifier is only needed to determine an abstract object corresponding to a concrete object.

For at least these reasons, Applicants respectfully submit that independent Claim is clearly allowable over *Bowman-Amuah*, whether *Bowman-Amuah* is taken singly or even in combination with allegedly obvious information or with *Bass*.

CONCLUSIONS

Applicants have made an earnest attempt to place this case in condition for allowance. For the foregoing reasons, and for other reasons clearly apparent, Applicants respectfully request full allowance of all pending Claims.

If the Examiner believes that a telephone conference would advance prosecution of this Application in any manner, the Examiner is invited to call the undersigned attorney for Applicants at the Examiner's convenience.

Although Applicants believe no fees are due, the Commissioner is hereby authorized to charge any fees or credit any overpayments to Deposit Account No. 02-0384 of Baker Botts L.L.P.

Respectfully submitted,

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